

From owner-qrp-l@netcom.com Fri Feb 3 21:14:50 1995
Date: Fri, 3 Feb 1995 13:21:58 +0800
From: Raymond.Anderson@Eng.Sun.COM (Ray Anderson)
Message-Id: <9502032121.AA11829@radium.Eng.Sun.COM>
Subject: "OHR Sprint" Rig

A quick note for QRP'ers in the silicon valley:

I was at Halted Electronics yesterday (off Central Exprwy near Lawrence) and noted that they had the OHR Sprint kit in stock there.

72 de WB6TPU, Ray
raymonda@radium.eng.sun.com

From owner-qrp-l@netcom.com Sat Feb 4 02:28:23 1995
Subject: (none)
From: brian.carling@acenet.com (Brian Carling)
Message-Id: <2a6.9496.500@acenet.com>
Date: Fri, 03 Feb 1995 09:09:00 -0500

>From: brian.carling@acenet.com

Ron Doyle N8VAR writes:

DR>I missed you on Tuesday night. That's really surprising to me because I
DR>usually get towards the Maryland direction real well. Of course the key work
DR>is *usually*.

Yeah Ron, the band was kinda bad that night here.
However, I have worked some good QRP contacts in the last few days here,
mostly using 5 watts to a new antenna. I put up a 128 foot wire at about
15 feet for working the 160 meter contest & ever since then I've used it
on all bands with the tuner. It works REALLY well!
I got N40HB in Mississippi on 20 m. He was using an MFJ rig with 5
watts, and then I also got WA5ZTP/QRP (TX), N9CHU (AL) and N8CKU (MD)
all on 40 meters with my rig set for 5 watts.

72 de AF4K
brian.carling@acenet.com

~ SLMR 2.1a ~ What do you mean? You actually READ these taglines?!?

From owner-qrp-l@netcom.com Fri Feb 3 15:49:20 1995
Date: Fri, 3 Feb 1995 05:48:49 -0800 (PST)

From: H Smith <hbs@crl.com>

Subject: 40m /M/QRP DX!

Message-Id: <Pine.SUN.3.91.950203053520.5824B-100000@crl111.crl.com>

Wow, what a beautiful morning in Dallas! Temp was in the 60's and the sky was very clear.

I'm usually out of the house by 6am CST and I have a 50 minute drive from McKinney, which is about 35 miles north of Dallas to Duncanville which is about 10 miles south of Dallas. Lots of time for some 40 meters CW Mobile contacts.

Had a nice QSO with Al, K9JMI who is using a DX-60 and an HQ-170. Memories!

Almost to work, the building is in site, I hear VP5/W9VNE around 7010 working a mini-pileup. It took about 4 tries but I finally got through with 5 watts.

As I pulled into the parking lot, I spun the dial one more time and heard a CQ from JH2GZY around 7015. I thought "what the hey" and gave him a call.

Bingo, he came back. He was 569, and he gave me a 559. It was a full-fledged QSO, ie. we exchanged rigs, WX, 73's, etc. His name is Kiy in Shizuoka and he is running a TS440.

I am running a TS-50 cranked back to 5 watts in the low power position and the antenna is a Bug Catcher on a Jeep Cherokee (with 5 speed). Key is a Vibroplex and the keyer is an el cheapo MFJ.

What a thrill!

CUL,

Smitty, NA5K

Henry Smith (hbs@crl.com)

From owner-qrp-1@netcom.com Fri Feb 3 22:27:05 1995

Date: Fri, 3 Feb 1995 11:09:21 -0800 (PST)

From: H Smith <hbs@crl.com>

Subject: 40m /M/QRP DX!

Message-Id: <Pine.SUN.3.91.950203110819.889A-100000@crl110.crl.com>

(2nd attempt at posting)

Wow, what a beautiful morning in Dallas! Temp was in the 60's and the sky was very clear.

I'm usually out of the house by 6am CST and I have a 50 minute drive from McKinney, which is about 35 miles north of Dallas to Duncanville which is about 10 miles south of Dallas. Lots of time for some 40 meters CW Mobile contacts.

Had a nice QSO with Al, K9JMI who is using a DX-60 and an HQ-170. Memories!

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What a thrill!

CUL,

Smitty, NA5K

Henry Smith (hbs@crl.com)

From owner-qrp-1@netcom.com Fri Feb 3 19:23:49 1995

From: JEVERHART@cayman.vf.ge.com

Date: Fri, 3 Feb 1995 10:46:31 -0500 (EST)

Message-Id: <950203104631.2241b5c7@cayman.vf.ge.com>

Subject: 79'er test

Anybody hear any activity in the NEQRP 79'er test last night? I listened on

3579+/- KHz from 9-10 pm without luck. From here is South Jersey. I did hear some faint (229) cw at about 3576 but couldn't copy a call sign. There was also a commercial station "SXA36" or something like that at about 3650. Is that from Greece? he was usually 579, peaking 599.

Didn't have my xtal controlled xmtr working so I didn't call CQ or anything. Had I heard a "real" participant I would have answered them with my Argo. Next week I should have my xtal-controlled rig working. Hope there's someone around to work...

72/73,

Joe E. N2CX

From owner-qrp-l@netcom.com Sat Feb 4 01:48:10 1995
From: JEVERHART@cayman.vf.ge.com
Date: Fri, 3 Feb 1995 23:18:15 -0500 (EST)
Message-Id: <950203231815.22419d10@cayman.vf.ge.com>
Subject: Autek RF-1 Product review

Gang,

I've inflicted several tales on the list about the Autek Antenna analyzer. The least I can do is to present a product review for your edification and enlightenment :-).

Here it is!

Autek RF-1 Antenna Analyzer Product Review

Santa Claus was very good to me this year. I got exactly the present I wanted - an Autek RF-1 Antenna Analyzer. Of course I helped things along by attaching a copy of an ad from QST to my Christmas wsh list...

The Analyzer is a small hand-held device intended primarily for measurements on hf amateur radio antennas: Condensed specs are:

Case: 4.5x2.5x1.5 inches, black ABS plastic

Weight: 7 ounces

Tuning range: 1.2 to 35 MHz

Display: LCD with 1/2 inch digits

Readings:

VSWR: up to 6:1
Impedance: 8 to 2000 ohms
Inductance: .04 to 300 uH
Capacitance: 1 to 9999 pf

Power: 9 volt Alkaline battery (not included)

The appearance of the instrument is deceptively simple. It has an SO-239 coaxial connector and a ground lug for connections on one end and a LCD display on operating controls on its face. Operating controls are: pushbuttons for power on/selection of frequency band and mode and two knobs for tuning. It tunes over the hf band in several ranges and is tuned by means of coarse and tune controls. Operating frequency is displayed on its multi-purpose LCD display. The display is also used to show measured values, depending on the mode chosen. Mine also included an accessory kit consisting of a couple of mini-gator clips a banana plug and directions for use of the analyzer to measure rf components.

Use of an microcontroller chip allows the RF-1 to perform multiple functions and give unambiguous digital readings. Operating theory is not given in the instructions, but it appears to use a broadband bridge-probably resistive. Hints in the instructions mention also diode detectors and an A/D converter. It appears that the device performs analog rf measurements, rf detection and conversion to digital data, then calculation and display using the microcontroller. SWR and rf impedance are calculated and displayed directly. Inductance and capacitance readings are calculated as if the measured impedance were pure reactance. Methods are described for using displayed values to determine the type of reactance present and estimating the resistive component of the impedance.

Its operation is similar to SWR analyzers made by MFJ, but it has the added advantage of calculating and displaying more than just frequency, SWR and "Resistance." Not only that, but the digital display is much easier to read than the analog MFJ meters. On the other hand the high end MFJ units have a jack to allow use of the internal frequency counter with external signals - a feature that the Autek device lacks. The RF Analyzer's battery life is not given, but is probably longer than its competitors because of its liquid crystal display. At 1/4 the size and weight, the RF-1 is far more usable than the MFJ units in outdoor or tower-top applications.

The very thorough instruction book covers a wide variety of uses

including:

- Impedance measurement
- SWR
- L&C measurement
- Converting between L and C and Z
- Making 1/4 and 1/2 wavelength transmission lines
- Measuring cable loss
- Determining cable impedance

and several others. It also gives practical guidelines for usage and expected error values for its various operating modes along with methods to minimize measurement error. The book itself is a minicourse in rf and antenna measurement techniques.

Who should buy one? Well, the obvious first answer is the serious hf antenna experimenter or builder. The unit is inexpensive enough that even a casual "appliance operator" might like to have one to check his antenna periodically. Unlike ordinary SWR meters the RF-1 allows its users to determine the nature of antenna degradation if it occurs. Additionally, the serious ham builder can use the expanded measurement capabilities of the gadget for analysis and measurement of the bench. It isn't a lab-grade instrument, but then again, it doesn't cost \$30,000. With a few smarts it can be very handy for checking rf components and resonant circuits as well as antenna, feedline and antenna coupler adjustment.

Availability:

The RF-1 is available only by mail order from
Autek Research
P.O. Box 8772
Madeira Beach, FL 33738
813-886-9515

Note that the company has recently moved and the above is their NEW address and phone number as of about December 1994. The cost is 129.95 plus \$6.00 shipping and handling and they do accept Mastercard and VISA by phone. Shipping time may vary since Autek is apparently a small company without a large inventory. I've heard of 3 to 4 weeks delay. Mine was just under a month at Christmas, which is phenomenal.

I have no interest in the company other than being a very satisfied customer.

72/73,

Joe Everhart, N2CX

From owner-qrp-l@netcom.com Fri Feb 3 22:31:17 1995
From: Dan_Tayloe-P26412@email.mot.com
Date: 3 Feb 95 13:06:00 -0600
Subject: Re: Class D & E amplifiers
Message-Id: <M1025002.005.fxg3.5687.950203201217Z.CC-MAIL*/OU=SATCG/OU=AZBH/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Has anyone on the list ever built a Class D or E amplifier ?

>I am interested in designing and building a Class D possible with
>IRF510 transistors for a 100% efficiency portable QRP transmitter.

>Looking for inputs as to any problems and/or solutions anyone has
>had with the Class D, i.e. was it difficult to tune, harmonics, etc.

>de stan AK0B

>e-mail via randyw@crl.com

100% efficiency is not possible. For a class "D" push-pull amplifier, the
power *lost* by a class "D" amp is given by the following formula:

$$P = C \cdot (2f) \cdot (2V) \cdot (2V)$$

where:

C is the output cap of the device (IR510 = 100 pf)
V is the supply voltage minus the saturation voltage of the device
f is the frequency of operation.

Example: 24v, 1 amp power input (24 watts)
IR510 , Rds on = 0.6 ohm, assume 3A peak current, Vsat = 1.8v
therefore, V = 24 - 1.8 = 22.2v

$$\text{@ 3.5 MHz, Power loss} = 100\text{e-}12 \cdot 2 \cdot 3.5\text{e}6 \cdot 2 \cdot 22.2 \cdot 2 \cdot 22.2 = 1.38 \text{ watts}$$

I assume you also need to take the resistive loss of the device into
account, $0.6 \cdot 1 = 0.6$ watts average loss.

Therefore, you have: $(24 - 1.98) / 24$ or about ***92% eff***.

The efficiency is driven by the charge/discharge of the output C of the
device and gets worse with frequency.

@ 10 Mhz, Power loss = $100\text{e-}12 * 10\text{e}6 * 8 * 22.2 * 22.2 = 3.9$ watts

eff = $(24 - 3.9 - 0.6)/24 = \text{***}81\%\text{***}$.

Since the "C" term is not dependant upon the power level you are trying to achieve, trying to run the IR511 as a QRP final class "D" will likely hurt you. You may want to pick a device with a lot lower output "C" if you want QRP levels.

Motorola has a application note AR-141 discribing MOSFETS in Class D/E RF designs.

- Dan Tayloe, WB0NVB

From owner-qrp-l@netcom.com Fri Feb 3 13:41:12 1995
Date: Fri, 3 Feb 1995 12:05:00 -0500 (EST)
From: prvalko <prvalko@vela.acs.oakland.edu>
Subject: Dayton
Message-Id: <Pine.3.89.9502031204.A125-0100000@saturn.acs.oakland.edu>

Hi all.

Well, I think I'd like to stay with the QRPers at The Days Inn South, this year. Anyone have an idea how I can secure a room? Do I call the hotel directly or is there some other way?

73 =paul= wb8zjl

From owner-qrp-l@netcom.com Sat Feb 4 03:07:08 1995
Date: Fri, 3 Feb 1995 22:35:44 -0800 (PST)
From: Alan Kaul <kaul@netcom.com>
Subject: EWE Antenna/Feb 95 QST
Message-Id: <Pine.3.89.9502032242.A10238-0100000@netcom9>

I live on a city lot without much room for a long receiving antenna for 80-160. Have any of you tried the EWE 38' antenna written up in QST? How well does it work? Are you hearing stuff you can't otherwise hear? Are you using a receiver pre-amp? If so, how much gain from the pre-amp? The antennas are supposed to have good front to back, but being verticals in phase, do they seem to pick up much noise? How bad is the mutual coupling to a 80/160 vertical within 1/8-1/4 wave? Is building one worth the effort or a waste of time??

Pls and tnx. 72/73 de Alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-l@netcom.com Fri Feb 3 22:00:19 1995
From: Jack Ponton <jwp@chemeng.ed.ac.uk>
Date: Fri, 3 Feb 1995 14:00:42 GMT
Message-Id: <199502031400.0AA06317@aith.chemeng.ed.ac.uk>
Subject: Re: High efficiency D/E amps

In the UK there have been a couple of qrp designs by G4ENA in the RSGB's Radcom magazine. One is an elegant compact CW transceiver which uses a CMOS analog switch as the receive mixer. This design also appears in the new RSGB handbook. The other is a 160m am transmitter intended for DF fox hunting. It should be adaptable for 80m and/or CW. Both use cheap switching transistor finals. I don't recall the dates of the Radcom articles, but can look these up for anyone who asks.

72/3 de Jack gm0rwu

From owner-qrp-l@netcom.com Sat Feb 4 02:38:13 1995
From: david.gauding@slug.org (David Gauding)
Subject: Miniature 7 MHz Xcvt
Date: Fri, 3 Feb 1995 14:59:39 GMT
Message-Id: <9502031030071620@slug.org>

I recently acquired a partially stuffed pcb for a "Miniature 7-MHz Transceiver" featured in an article by W7BBX in the July 1974 issue of HAM RADIO.

Wondering if any of our veteran qrp ops/homebrewers are familiar with this design?

Has anyone built it? Comments, war stories etc. will be read with great interest and enthusiasm.

Many thanks!

73 de Dave, NF0R nf0r@slug.org

From owner-qrp-l@netcom.com Sat Feb 4 00:26:29 1995
From: JEVERHART@cayman.vf.ge.com
Date: Fri, 3 Feb 1995 23:23:20 -0500 (EST)
Message-Id: <950203232320.22419d10@cayman.vf.ge.com>

Subject: Mizuho/AEA rig info

I've seen several listings lately of these rigs on the list. I have a potential opportunity to pick up one that is a "handyman's special." Somebody butchered one and I think I can get it cheap. However there's no documentation with it. Can I impose on some kind soul to send me a copy of the manual, particularly the schematic diagram and hopefully some technical specs? If so, send me private e-mail and I'll send you a SASE and copying costs. Even if I don't buy the basket case I can learn something from their schematic :-).

72/73,

Joe E. N2CX

From owner-qrp-l@netcom.com Sat Feb 4 02:28:23 1995
Subject: NE '79 Test
From: brian.carling@acenet.com (Brian Carling)
Message-Id: <2a6.9497.500@acenet.com>
Date: Fri, 03 Feb 1995 09:09:00 -0500

>From: brian.carling@acenet.com

Hi Chuck!

CA>Remember tonite (Thurs) is the first night of the
CA>month long contest for NE club. On 3.579MHz
CA>starting at 9pmEST to 10pmEST work the gang from
CA>the NE club and their xtal controlled (you have
CA>to be on freq) QRP transmitters.

Got it but eeeeeek, I listened on 3579 and hear a lot of weak
S1-2 signals WAY down below the S9 +10-20 dB static crashes
that are dominating the band tonight!

~ SLMR 2.1a ~ What do you mean? You actually READ these taglines?!?

From owner-qrp-l@netcom.com Fri Feb 3 20:42:11 1995
From: Byron8LCZ@aol.com
Date: Fri, 3 Feb 1995 19:17:14 -0500
Message-Id: <950203191712_12225004@aol.com>
Subject: Re: New QRP+ - first impressions

After making well over 200 contacts and working an additional three contests with the QRP Plus, I just cant resist the temptation to reply to your reply:

1. I have not noticed microphonics in my QRP Plus nr 263.

2. I have not heard a cabinet resonance but the audio amp distorts after 3/4 turn of the AF gain control. I dont feel theres enough audio amplification, so i use an external speaker/amp.
3. opposite sideband, dont care. i'm a CW man
4. Faster AGC would be nice, so would lower taxes, but i'm not holding my breath.
5. The AGC thump or popping is very annoying, hard to believe we would have to put up with that in a 600 dollar rig. I think many of the single band kit xcvsr being sold today have the same problem. but you dont hear much being said about it. i wonder why.
6. Lighting the front panel can be done with 12 volt 25 ma lamps from radio shack for 1.19 each. If he had installed a backlit LCD readout, the back light would have to be on all the time to see the display clearly. And it would eat batteries. this rig was designed for the battery user, that is its main use.
7. I like the fast tuning feature, i think its one of the Plus's unique features.
8. Yep, it could use a noise blanker.
9. memory button: not a problem for me, but i frequently tune around with the RIT on, then try to call someone, not realizing, i'm still on RIT and my transmit frequency is 50 khz away. thats a pain.
10. audio gain on SSB: my Kenwood dynamic mic and my MFJ electrek mics dont deliver enough audio to drive the transmitter to more than 1 to 1.5 watts out while talking. it doesnt have a speech processor and it only runs 5 watts out PeP, not 10w PeP. But then again, most of us are CW QRP'ers, very few enter the SSB contests or operate SSB while QRP.
11. I like the band change method, but wish i had more memorys for WWV and a few other stations. with 9 bands and 2 modes, that eats up 18 memorys, there are 4 WWV freqs i like to monitor. but i can only program 2 of them. and the fastest tuning rate is about 600 khz per turn. When i change bands on the kenwood 450, it always returns to my last freq on that band. The Plus always goes to the memory freq, usually 14.060, 21.060 etc. sometimes thats good, sometimes it isnt.
12. Some single band rigs may have a hotter receiver. but when the band dies, you might as well turn them off. with the Plus, you just change bands and QRZ.....

13. Digital SCAF: terrific audio filter, 100 hz to 2400 hz in 100 hz steps. there arent enough ooooo's in smoooth to describe it.

14. no RS-232: why not add a built in antenna tuner and FM and USB and LSB and built in voice synthesizer for the blind and notch filter and XIT and an RF gain control and IF shift. Because then you'd have a 1200 dollar radio and he'd have to charge you 1200 bucks. it would also draw more current. Somewhere you have to draw the line, shoot the engineer and build the radio and sell it to pay the rent.

There isnt another QRP rig to compete with the Plus. Its the most rig for the least amount of dollars that draws the least amount of current that operates all HF bands, that has the most useable features, rock solid VFO's and is the easiest to use.

How many QRP radios out there for 600 dollars have a LCD display ? a S-meter ? Dual VFO's ? an RIT with unlimited range ? cover 9 ham bands with CW and SSB ? only draw 140 ma on receive and 1.5 amp on transmit ? run the full 5 watts out on all bands ?

N O N E !

enuff said, I agree, its a keeper !

72, Byron WA8LCZ

From owner-qrp-l@netcom.com Fri Feb 3 22:07:42 1995
Date: Fri, 3 Feb 1995 11:48:45 -0330 (NST)
From: Robert Gobrick <bgobrick@nlnet.nf.ca>
Subject: Re: New QRP+ - first impressions
Message-Id: <Pine.OSF.3.91.950203113449.32647A-1000000@terra.nlnet.nf.ca>

Dave - thanks for your thorough comments on the QRP+ and thanks for your lists of likes and dislikes - too many reviews I read shy away from saying what they don't like (is that because they are too embarrassed to say that maybe their \$600 was not wise or is it because they are afraid that they will drive the manufacturer out of the QRP business if the negative comments effect sales - and thus support for their new aquisition - I know that saying something that QRPers DON'T like about a rig is not a trait here on the QRP-L - hi)

Anyway your comments are good especially if they get back to the manufacturer who can improve his product with constructive feedback - so maybe there will be a QRP+ Mark II (maybe just some EPROM changes). Also seeing companies like S&S Engineering responding with a new version of the ARK-4 that uses a tuning knob (digital shaft encoder) to me is very encouraging since it shows that the Manufacturer is trying to meet

what the market wants and thus remain in business - I applaud companies like that.

OK - of my soap box today - I had to get this off my chest since I just had a bad experience with one manufacturer rep from a big company that makes QRP rigs saying that HE (not his company) didn't appreciate negative comments written about their rigs _ in my case a BIG FIX to a real problem that the rig exhibited - and here I was only trying to HELP make the rig a better unit - ho-hum.

Thanks again 72 Bob V01DRB/WA6ERB

From owner-qrp-1@netcom.com Fri Feb 3 07:21:33 1995
From: mtrail@violet.berkeley.edu
Date: Thu, 2 Feb 1995 22:53:05 -0800 (PST)
Subject: Norcal 40 still available?
Message-Id: <Pine.3.89.9502022202.A9429-0100000@violet.berkeley.edu>

Hi, all

Are the Norcal qrp'ers still accepting orders (and memberships :-)) for the latest run of the Norcal 40??? And is WA6GER still the contact person for this?

Ahem. Just wondering.

Matt Trail KN6CR

From owner-qrp-1@netcom.com Sat Feb 4 02:27:38 1995
Date: Fri, 3 Feb 1995 08:02:03 -0500
From: Robert Penneys <penneys@chopin.udel.edu>
Message-Id: <199502031302.IAA00840@chopin.udel.edu>
Subject: Opinions on Scout?

I have the MFJ QRPers for 40 and 20, which I am currently using mobile on the way to work. Thinking about the Scout, with modules for 40, 30, 20...

If you have an opinion or viewpoint about this radio, I would certainly be interested to hear it.

Tnx agn. Bob

Bob Penneys, WN3K Frankford Radio Club N.E.R.D.S.
Internet: penneys@brahms.udel.edu Work: Ham Radio Outlet, Delaware

From owner-qrp-1@netcom.com Fri Feb 3 19:24:52 1995

Date: Fri, 03 Feb 1995 10:01:21 -0600 (CST)
From: cfm5723@tntech.edu (Conard Murray)
Subject: PCB help needed
Message-Id: <01HMLXDDJB2ACP3H9Z@tntech.edu>

Hello All... I need help with manufacturing circuit boards. I seem to remember some info a while back on the list about taking the output from a copier or laser printer and transferring it to a copper board as the resist. I can't get the toner to stick to the copper very well. Any suggestions/pointers?

Thanks and 72 de Conard WS4S

Conard Murray WS4S
R&D Engineer, Electrical Engineering Department
Tennessee Tech University
Cookeville, TN 38505
615-372-3718 voice
615-372-6172 fax
cfm5723@tntech.edu e-mail
ws4s @ wa4uce.midtn.tn.usa na packet radio

From owner-qrp-l@netcom.com Fri Feb 3 22:18:24 1995
From: Rick=Covert%TS=SysCall%CS=Hou@bangate.compaq.com
Message-Id: <m0raRZA-000u0aC@twisto.eng.hou.compaq.com>
Date: Fri, 3 Feb 95 11:10:41 CST
Subject: Phone Number for Hambrew Magazine

Does anyone have the phone number for Hambrew magazine? I want to subscribe and I have heard the 800 number has been disconnected.

72's

Rick, WD5L

From owner-qrp-l@netcom.com Fri Feb 3 18:29:50 1995
Message-Id: <9502032115.AA03290@us4rnc.pko.dec.com>
Date: Fri, 3 Feb 95 16:15:14 EST
From: "N100Q Tom R. @ MR01 03-Feb-1995 1558" <randolph@est.enet.dec.com>
Subject: QRP shopping list

QRPers,

I had a request for this, and its been a while, so here once again is the QRP Shopping List. This was originally a list of all parts that showed up 3 or more times in "W1FB's QRP Notebook". I've updated it some, by removing stuff that's no longer available and adding cheap substitutes for those that are now priced out of sight. A few things that aren't readily available are still on here just because they're classic QRP parts, for instance dual-gate MOSFETs. I take this list, with scribbled-in last minute items, to the ham fleas around

here.

Anything with a + next to it, buy extra. Anything with ++, buy about 100!

-Tom R. N100Q randolph@est.enet.dec.com

Bipolars	Dual-gate	Amidon cores	Diodes	Varactors	Chokes
2N918 2N4275	MOSFETs	T50-2+	1N914+	MV2105	1mH+
2N2102 2N4400+	3N140 3N211	T68-2+	1N4148+	MV2109	22uH+
2N2222A+ 2N4401+	3N187 40673	T80-2	1N34(Ge)	MV2115	15uH
2N2925 2N4403+	3N200 MPF121	T37-6+		MV104	10uH
2N3053 2N5179+	3N202 MPF122	T50-6+	Zeners		
2N3565 MPS3563		T68-6	6.8V	Schottky	Enamel
2N3641	JFETs	FT37-43+	9.1V	HP2800	Wire
2N3904+ MOSFET	2N4416+ MPF102+	FT50-43+	15V	MBD101	#12 #24
2N3906 3N128	2N5459 U310	FT50-63	33V		#18 #26
2N4037	2N5485 J310	BLN43-202	56V		#20 #28
2N4124	2N5486	Bead, 850mu	(0.4 & 1W)		#22 #30

Chips	Pots	Mini Air	Ceramic, Mica
CA3011 (RCA)	NE555 (Sig)	100k+	Variable
CA3028	NE565	10k+	5 50
CA3046	NE602	1k	10 60+
LM386 (Natl)	S5596K		15 100+
LM373	SL621 (Plessey)		25 300
LM723	TL442CN/SN76514 (TI)		
MC1350P (Moto)		365	IF transformers
MC1496G	Op Amps	(vernier	455 KHz
MC1590G	741	knobs)	9.0 MHz
MC3346P	747		10.7 MHz
MWA110	TL081 (TI)		(doub & sing tuned)

Disk Ceramic	NP0	Electrolytic	Polystyrene
22 100+ 0.001+ (102)	22 100+	or Tantalum	220
27 130 0.005 (502)	27 130	1+	560
33 150+ 0.01+ (103)	47+ 150	2.2+	1000
47+ 220 0.1++ (104)	56+ 220	4.7	1500
56+ 470	68	10+	2000
68+ 680 (a few small value N750 for VFOs)		22+ (16 & 25V)	2200+
		220	10000
			15000

Resistors (1/4w 1/2w, comp film)	Silver Mica	Meters, miniature
10+ 100++ 1.0k++ 10k++ 100k++	10 130 390	50uA
15 150 1.5k+ 12k 220k+	22 150+ 470	100uA
22 180+ 2.2k+ 15k 470k+	33 180+ 560	200uA
33+ 220 2.7k 22k+	47 220 750	500uA
47+ 270+ 3.3k+ 27k+		

56+	390	3.9k	33k	56	240	1000
	470+	4.7k+	47k+	68	270+	1200
	560+	5.6k+	56k+	100	330	2000

RF-capable power transistors (35MHz<f<150MHz; ICmax>1A)			Crystals				useful
			f	/2	/3	/4	uproc-type
2N2102	MPSU01	MJE180	1.80				1.8432
2N3553	MPSU03	MJE181	3.50	1.75	1.17		3.5795 3.6864
2N3866	MPSU04	MJE182	7.00		2.33		7.00
2N4895	MPSU05		10.10	5.05	3.37	2.53	5.0688
2N5320	MPSU06	D44H	14.00		4.67		7.00
2N5321	MPSU07	D44C	18.07	9.04	6.02	4.52	
2N6338	MPSU45		21.00	10.50		5.25	7.00
2N6340			24.89	12.45	8.30	6.22	
2N6341			28.00		9.33		7.00
			50.00	25.00	16.67	12.50	
			144.0	72.00	48.00	36.00	48.00 72.00

From owner-qrp-1@netcom.com Fri Feb 3 19:35:26 1995
 Date: Fri, 3 Feb 1995 15:26:57 -0800
 From: myers@bigboy73.West.Sun.COM (Dana Myers)
 Message-Id: <9502032326.AA01165@vr1000.West.Sun.COM>
 Subject: Re: QRP shopping list

Tom Randolph wrote:

> QRPers,
 > I had a request for this, and its been a while, so here once again is the
 > QRP Shopping List. This was originally a list of all parts that showed up 3 or
 > more times in "W1FB's QRP Notebook". I've updated it some, by removing stuff
 > that's no longer available and adding cheap substitutes for those that are now
 > priced out of sight. A few things that aren't readily available are still on
 > here just because they're classic QRP parts, for instance dual-gate MOSFETs.
 > I take this list, with scribbled-in last minute items, to the ham fleas around
 > here.
 >
 > Anything with a + next to it, buy extra. Anything with ++, buy about 100!
 >
 > -Tom R. N100Q randolph@est.enet.dec.com
 >

> Bipolars	Dual-gate	Amidon cores	Diodes	Varactors	Chokes
> 2N918 2N4275	MOSFETs	T50-2+	1N914+	MV2105	1mH+
> 2N2102 2N4400+	3N140 3N211	T68-2+	1N4148+	MV2109	22uH+
> 2N2222A+ 2N4401+	3N187 40673	T80-2	1N34(Ge)	MV2115	15uH
> 2N2925 2N4403+	3N200 MPF121	T37-6+		MV104	10uH
> 2N3053 2N5179+	3N202 MPF122	T50-6+	Zeners		
> 2N3565 MPS3563		T68-6	6.8V	Schottky	Enamel

> 2N3641	JFETs	FT37-43+	9.1V	HP2800	Wire
> 2N3904+	MOSFET	2N4416+ MPF102+	FT50-43+	15V	MBD101 #12 #24
> 2N3906	3N128	2N5459 U310	FT50-63	33V	#18 #26
> 2N4037		2N5485 J310	BLN43-202	56V	#20 #28
> 2N4124		2N5486	Bead, 850mu	(0.4 & 1W)	#22 #30

Some comments:

Some of these parts are replacements for the others. For example, the 2N5179 replaces the 2N918 for sure, and the 2N3565 and MPS3563 in most cases. The 2N4416 and MPF102 are almost always interchangeable, and the MPF102 has historically been cheaper. The J310 is cheaper and (probably) more available now than the 2N4416, MPF102, 2N5484 and 2N5486. The J310 and U310 are the same die in different packages; the J310 is in a plastic T0-92 and is usually cheaper than a U310 (in a metal T0-72).

The 1N914 diode is replaced by the 1N4148, don't bother looking for 1N914s. An HP-2800 is an incomplete part number; you need to the 4 numbers after the "2800".

Few of the MOSFETs listed are available anymore, and I have yet to look for substitutes, though the ECG222 is probably the generic item.

From owner-qrp-l@netcom.com Fri Feb 3 18:49:42 1995
 Date: Fri, 3 Feb 1995 14:55:13 -0800
 From: dgf@netcom.com (David Feldman)
 Message-Id: <199502032255.0AA10186@netcom14.netcom.com>
 Subject: QRP+ Initial impressions:followup 1

I posted yesterday my initial impressions on the QRP+, having received it the same day. I received a number of favorable responses, so I'm glad to have made the posting.

To correct one of the items - the actual date of order on my unit was 11/15/94, and the received date was 02/02/95, for about 10 weeks total turn-around time (vs. 8 weeks as noted; I was talking there about the delay from the first committed delivery date of 12/05/94 to the actual delivery date of 02/02/95).

I did receive another correction. I had indicated that when you push the MEM button you would lose the VFO frequency. Instead, I have been told that pushing MEM repeatedly will swap between VFO and the memory position. Given this, there does not seem to be a problem with inadvertently pushing MEM and losing your VFO frequency setting. I will confirm this, but I'm sure the writer was correct and that I was hasty and in error.

Also, I have made some subsequent observations: (1) I am getting only about 2W output on 10M, but still 5W out on 12M. This may be a defect, because power is pretty constant across all other bands. (2) Output power is quite sensitive to DC supply voltage. I'll try to quantify this, but running the unit from a 12V gel-cell vs. a 13.8V AC supply produced significant difference in output power. (3) I have been able to reproduce now the "low transmit audio" problem. The peak vs. average power measured on a Bird 43P with a 50H slug is quite a difference, about a 3:1 ratio vs. about a 2:1 ratio on a Ten-Tec Argonaut. I'm not sure if this is a mic gain issue or an overactive ALC, but I need to investigate further. I have tried two separate mics from 2M FM rigs (per the suggestion in the manual) and got the same result. Maxing the mic gain didn't help. All measurements were made into a 50 ohm dummy load and verified on various bands and control settings.

I received in subsequent replies several suggestions that my review would be stored or reprinted. PLEASE hold off on either. I'll post a corrected and more complete review by Sunday 2/5/95 that will correct any errors in the first posting and incorporate these (above) and any other observations I make. At that point, re-posting, re-printing, or other re-use is OK provided that the material is re-used in it's entirety and is attributed properly.

I'd like to point out one other thing - my observations are based entirely on use of S/N 0385 in _MY_ working environment. I have not had any new discussions with the vendor, so I'm going entirely off my "out of the box" observations. Needless to say, I have no relationship with INDEX LABS except as a customer for this one unit.

73 Dave WB0GAZ dgf@netcom.com

From owner-qrp-l@netcom.com Sat Feb 4 00:07:59 1995
Date: Fri, 3 Feb 1995 15:42:50 -0800
From: myers@bigboy73.West.Sun.COM (Dana Myers)
Message-Id: <9502032342.AA01186@vr1000.West.Sun.COM>
Subject: Re: QRP+ Initial impressions:followup 1

> Date: Fri, 3 Feb 1995 14:55:13 -0800
> From: dgf@netcom.com (David Feldman)
> To: qrp-l@netcom.com
> Subject: QRP+ Initial impressions:followup 1
>

> Also, I have made some subsequent observations: (1) I am getting only about
> 2W output on 10M, but still 5W out on 12M. This may be a defect, because
> power is pretty constant across all other bands. (2) Output power is
> quite sensitive to DC supply voltage. I'll try to quantify this, but

> running the unit from a 12V gel-cell vs. a 13.8V AC supply produced
> significant difference in output power.

Keep in mind, the output power of an amplifier will generally vary as the square of the change in power supply. In other words, dropping from 13.8V to 12V should result in about 75% of the power output as seen at 13.8V. Going from 13.8V to 10V, as you might see on a mostly discharged battery, results in maybe a 50% drop in expected power output.

From owner-qrp-l@netcom.com Sat Feb 4 02:38:51 1995
From: fmittchell@rdccclink.rd.qms.com
Date: Fri, 03 Feb 95 10:38:35 CST
Message-Id: <9501037918.AA791836715@rdccclink.rd.qms.com>
Subject: Re[2]: Internet

>To: Byron8LCZ@aol.com, qrp-l@netcom.com
>Subject: Re: Internet
>Sender: owner-qrp-l@netcom.com
>Precedence: list

>Byron,

>For great Internet service, call Netcom at 408-983-5950. They offer a free
>GUI (one of the best) and full Internet services. Only \$19.95 a month for
>40 hours of prime time usage and unlimited non-prime usage.

>You're right, though, I use AOL for mail, and Netcom for everything else.

>Regards,

>Duffy - WB8NUT

hey guys, sorry to burst the bubble, but netcom has gotten overloaded lately since they went public and sold their subscribers for \$3,600.00 each (yes, that's right, \$3,600.00 each)... they are slow as christmas, or maybe even slower... and i am telnetting in to my account there... reading my mail or the news, there will be delays of sometimes 30 seconds or more where the connection just dies... in the early days (a year or so ago), you could complain to root and they would respond... now, complaints about the slow service go unheeded... and, if you make a followup post to a news item, it is not posted to netcom!!! how about that? (i don't know where they dump the post off to, but it eventually appears back on netcom)...

so, i would suggest that you check out some of the other commercial internet providers before you spend your money... several locals here are using cris... you might check them out...

mitch
wa4osr

* The *FIRST HAM OWNER* owner of The Vibroplex Co., Inc.!*

Felton "Mitch" Mitchell, WA4OSR
E-mail: fmitch@ns1.maf.mobile.al.us first choice
or fmitch@netcom.com second choice
Smail: 11 Midtown Park, E., Mobile, AL 36606-4141
334-478-8873 work, 334-342-7259 home 334-476-0465 FAX
Packet: WA4OSR@W4IAX.#MOBAL.AL.USA.NA

From owner-qrp-1@netcom.com Fri Feb 3 19:26:32 1995
Subject: Re: ten tec kits
From: brian.carling@acenet.com (Brian Carling)
Message-Id: <2a6.9498.500@acenet.com>
Date: Fri, 03 Feb 1995 09:09:00 -0500

>From: brian.carling@acenet.com

I got this from: bruce3900@delphi.com
Over on rec.radio.amateur.homebrew

BR>Brian -- funny meeting you here while surfing! Please add the following
BR>to your list:

BR>MXM Industries
BR>Route 1, Box 156c
BR>Smithville, TX 78957
BR>(512) 237-3906

BR>Owned and operated by Bruce Williams, WA6IVC.

Surely not THE Bruce Williams of Talk Net? Nah, net he's not a ham!
Too busy making money!

BR>Offers line of QRP kits including single conversion receiver, about \$50.00,
BR>3 watt tranxmitter, about \$30.00, Receiver/transmitter (the two above on a
BR>single board), about \$80.00, and a dynamite transceiver, double conversion
BR>receiver with crystal filter, 3 watt transmitter, About \$130.00. A SASE
BR>wile bring a catalog. All kits are complete except for cabinet and misc

BR>plugs and jacks for antenna, power, phones, and key. All kits come with a
BR>"if you can't get it working we will". Getting it working charges run about
BR>\$15.00, exclusive of customer damages.

BR>I don't work for Bruce, but I once did -- he was my boss in the aerospace
BR>industry from 1974 through 1985. He puts a real quality product out there
BR>for a reasonable price. His rigs are so much superior to most of the junk
BR>that's being sold out there it's a shame he doesn't get more publicity or
BR>do more advertising.

BR>Thanks,

BR>W6TOY/3

So there you have it guys. anyone tried one of these QRP kits?

72 de AF4K
brian.carling@acenet.com

~ SLMR 2.1a ~ What do you mean? You actually READ these taglines?!?

From owner-qrp-l@netcom.com Fri Feb 3 09:42:02 1995
From: PeterWK8S@aol.com
Date: Fri, 3 Feb 1995 07:18:31 -0500
Message-Id: <950203071829_11757732@aol.com>
Subject: Thanks for Digikey number!

Thanks everyone,
Whew, I must be the only one who doesn't order from Digikey!! If I do get
the s meter going I'll let you all know. Just got to figure out how to make
a clean front panel mount for it.

Pete WK8S

From owner-qrp-l@netcom.com Fri Feb 3 23:57:23 1995
Message-Id: <9502032302.AA19557@interval.interval.com>
Date: Fri, 3 Feb 1995 15:04:12 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: The definitive Mixer Paper

Thanks, Dave; I'll try to get a copy. Sounds great.

I'll forward this to a couple of other interested parties.

73,
Wayne

Dave wrote:

I'm sending this to you because I don't know how to post to the homebrew net; and I also think that you would be interested because of your Norcal40/Sierra work.

There is a quite good article called "Demystifying the Mixer" by Barrie Gilbert of Analog Devices in the most recent edition of the "Wireless Design & Development". This article is good and informative by itself, but the real gem is a paper "Design Considerations for BJT Active Mixers" that the "Demystifying the Mixer" was extracted from. It is available from Analog Devices and at 58 pages is the best paper I've seen written on mixers, modulators, and multipliers. The paper is written with a radio slant and covers the advantages and disadvantages of most commonly used mixer configurations. If you're into technically meaty papers; this one is great.

Dave Zimmerman ex WA6TQA, NORCAL QRP member
Sr. Engineer The Grass Valley Group

From owner-qrp-l@netcom.com Fri Feb 3 14:19:31 1995
Date: Fri, 3 Feb 1995 10:17:32 -0800 (PST)
From: John Dundas <ab6dg@netcom.com>
Subject: TO SOCAL INET/QRPers ONLY!
Message-Id: <Pine.3.89.9502031007.A15112-0100000@netcom19>

Paul has already made a fine report on our meeting after the TRW swapmeet, and suggested further get-togethers--I fully agree.

However, while we have calls, we (or at least I) don't have e-mail addresses for all attendees (and potential attendees)--it would be nice to have those, so messages could be directed only to them, thereby saving the eyes of the rest of this list!

So--if those interested in being on "the SoCal List" will send me names, calls and address, I will make my own distribution list, and will compile and post the results.

72/3 de John AB6DG

From owner-qrp-1@netcom.com Fri Feb 3 11:20:37 1995
Date: Fri, 3 Feb 1995 07:57:44 -0500
From: Robert Penneys <penneys@chopin.udel.edu>
Message-Id: <199502031257.HAA00654@chopin.udel.edu>
Subject: walking stick antenna?

Got info on walking stick antenna for 20 and 40? Tnx Bob

Bob Penneys, WN3K Frankford Radio Club N.E.R.D.S.
Internet: penneys@brahms.udel.edu Work: Ham Radio Outlet, Delaware

From owner-qrp-1@netcom.com Fri Feb 3 11:44:10 1995
Subject: ZF2AB
From: brian.carling@acenet.com (Brian Carling)
Message-Id: <2a6.9500.500@acenet.com>
Date: Fri, 03 Feb 1995 09:09:00 -0500

Newsgroups: rec.radio.amateur.misc
>From: brian.carling@acenet.com

---FOR IMMEDIATE RELEASE ---

Al Brown (WA3FYZ) and his sons, Jared and Al, Jr., will be operating ZF2 "A"1 "B"rown ZF2AB from Grand Cayman Island (IOTA NA-16 Grid Square: EK99gi) from 23-Mar-95 at apx 2000 UTC until 30-Mar-95 at apx 1630 UTC on phone 75, 40, 20 15 and 10 meters. They will *try* to check into the MEPN daily on 3920 kHz at 2300 UTC. They will be on the air --for sure-- for the US State Dept Foreign Service Net on Sunday, 26-Mar-95 on USB at 1500 UTC on 14.316 MHz, at 1530 UTC on 21.416 MHz and at 1600 UTC on 28.416 MHz.

If any station wants an individual sked, please contact ...
Packet: WA3FYZ@WB3V.MD.USA.NOAM
Internet: eab@VOA.gov
or send an NTS message to WA3FYZ.

QSL to either:

Direct: WA3FYZ - ZF2AB
Al Brown
8645 Tower Drive
Laurel, MD 20723-1244

or to the QSL Manager: WA3EOP

Page Pyne

P. O. Box 52

Hagerstown, MD 21741 USA

Best times and frequencies for skeds are:

Daily: 20 meters before 9:00 am, between 11:30 am
and 12:30 pm, and after 4:30 pm (EST).

Sunday, 26-March-95: Before or after the Foreign Service
Net (mentioned above) on 20, 15 or
10 meters.

Please pass the word.

72 de AF4K

brian.carling@acenet.com

~ SLMR 2.1a ~ What do you mean? You actually READ these taglines?!?